

CLAIMS

1. An interface for interfacing a digital device (unit)  
for transmitting and/or receiving a digital stream to a  
5 computer, the interface comprising:  
a digital stream transmitter/receiver for  
transmitting digitally streamed content and/or  
receiving digitally streamed content to/from the  
digital device;  
10 a computer bus interface for receiving/providing  
data to/from a computer bus of a computer for use by  
the computer and/or as provided by the computer; and  
a data converter for converting data received by  
the digital stream receiver into data useable by the  
15 computer when provided to the computer bus and/or for  
converting data received by the computer bus interface  
into digitally streamed data for transmission by the  
digital stream transmitter.
- 20 2. An interface according to claim 1, wherein the digital  
stream transmitter/receiver (transceiver) is configured  
to meet electrical characteristics of the digital  
stream device.
- 25 3. An interface according to claim 1, wherein the data  
converter is configured to meet data transmission  
protocols of the digital device.
4. An interface according to claim 1, wherein the computer  
30 bus interface is configured to meet electrical  
characteristics of the computer bus and to meet data  
transmission protocol of the computer bus.
5. An interface according to claim 1, wherein the data  
35 converter is configured to convert data into a selected  
digital stream format, the selected format being

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signalled to the data converter in data provided by the computer via the computer bus.

- 5 6. An interface according to claim 5, wherein the data converter is also configured to convert the digital stream from a selected format into data usable by the computer when provided to the computer bus, the selected format being signalled to data converter in the data provided by the computer via the computer bus.
- 10 7. An interface according to claim 5; wherein the data converter is configured to recognise the format of the digital stream and signal to the computer in data provided to the computer bus the recognised format.
- 15 8. An interface according to claim 1, wherein the computer bus is a Universal Serial Bus (USB).
- 20 9. An interface according to claim 1, wherein the data converter is a microcontroller.
- 25 10. An interface according to claim 9, wherein the microcontroller includes a general programmable interface.
- 30 11. An interface according to claim 1, wherein the data converter is a state-machine.
- 35 12. An interface according to claim 11, wherein the state-machine is a PLD or programmable logic arrays (PLA) or general programmable interface.
13. An interface according to claim 1, wherein the digital stream type is one of an ATSC compliant transport stream, DVB compliant transport stream, MPEG 2, MPEG 4, MPEG 7, digital satellite TV, TV tuner data, DVB/T,

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AC3, MP3, Dolby stereo, IEEE1394, IEEE488 or digital radio format.

14. An interface according to claim 1, wherein the digital stream may include video or sound.
15. An interface according to claim 1, wherein the data converter generates one or more control signals for control of the digital stream delivery to the digital device.
16. An interface according to claim 15, wherein the control signals are generated according to protocol requirements of the transport stream type the transceiver generates a digital clock signal and/or digital control signals.
17. An interface according to claim 1, wherein the transceiver transmission rate may be controlled by a signal provided by the computer via the computer bus.
18. An interface according to claim 1, wherein the data is provided by the computer bus to the computer bus interface in bursts which are buffered by the transceiver and transmitted to the transmission medium in a digital stream at the transmission rate.
19. An interface according to claim 1, wherein the transceiver buffers the digital stream sent by the digital device.
20. An interface according to claim 18, wherein the interface includes a buffer for buffering the data passing therethrough.

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21. An interface according to claim 1, wherein the digital stream transmitter is configured to generate two or more independent media streams.
- 5 22. An interface according to claim 21, wherein each digital stream is produced from a multiplexed data stream, the multiplexed data stream is provided to a respective buffer and de-multiplexed by a dual or multi phase clock signal.
- 10 23. An interface according to claim 1, wherein the transceiver converts voltage levels from those used by the data converter to those required by the digital device and vice versa.
- 15 24. An interface according to claim 1, wherein the transceiver converts voltage levels from those used by the digital device to those required by the data converter.
- 20 25. An interface according to claim 1, wherein the data converter may be controlled by data provided by a computer program.
- 25 26. An interface according to claim 25, wherein the computer program provides data to the data converter via the computer bus and in turn via the computer bus interface.
- 30 27. An interface according to claim 25, wherein the computer program includes a system driver for providing control of the operation of the data converter and/or transceiver and/or digital device.
- 35 28. An interface according to claim 1, wherein the computer program interfaces with the operating system (OS) of the computer.

29. An interface according to claim 25, wherein the computer program may control the display of video or playing of sound coded in the digital stream received by the digital stream receiver.
30. An interface according to claim 1, wherein the data converter includes a serial bus input/output port that is configured to generate serial bus signals for activation and/or control of the digital device.
31. An interface according to claim 30, wherein the serial bus signals are generated by software running on the microcontroller or hardware/firmware of the interface.
32. An interface according to claim 30, wherein the serial bus signals are generated according instructions provided by the computer in data sent to the microcontroller and stored in the interface.
33. An interface according to claim 30, wherein the serial bus signals are generated according instructions provided by the computer in data sent to the microcontroller and stored in the interface.
34. An interface according to claim 30, wherein the serial bus signals are generated to be compliant with a suitable standard.
35. A computer to digital device interface comprising:  
a computer bus interface for receiving data from a computer bus of a computer as provided by the computer;  
a digital stream transmitter for transmitting digitally streamed content to the digital device; and  
a data converter for converting data received by the computer bus interface into digitally streamed data for transmission by the digital stream transmitter.

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36. An interface according to claim 35, wherein the interface further comprises an input/output (I/O) port.
- 5 37. An interface according to claim 36, wherein the I/O port is configured to de-multiplex the streamed data to two or more digital streams.
- 10 38. A digital device to computer interface comprising:  
a digital stream receiver for receiving digitally streamed content from the digital device;  
a computer bus interface for providing data to a computer bus of a computer for use by the computer; and  
a data converter for converting data received by the  
15 digital stream receiver into data useable by the computer when provided to the computer bus.
- 20 39. A digital stream transmission medium to computer interface comprising:  
a digital stream transmitter/receiver for transmitting digitally streamed content and/or receiving digitally streamed content to/from the transmission medium;  
a computer bus interface for receiving/providing data to/from a computer bus of a computer for use by the computer  
25 and/or as provided by the computer; and  
a data converter for converting data received by the digital stream receiver into data useable by the computer when provided to the computer bus and/or for converting data received by the computer bus interface into digitally  
30 streamed data for transmission by the digital stream transmitter.